



IN THE

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Paul C. Kocher et al.  
SERIAL NO.: 09/930,836  
FILING DATE: August 15, 2001  
TITLE: CRYPTOGRAPHIC COMPUTATION USING MASKING TO  
PREVENT DIFFERENTIAL POWER ANALYSIS AND OTHER  
ATTACKS  
EXAMINER: Darrow, Justin T.  
GROUP ART UNIT: 2132  
ATTY. DKT. NO.: 44424162-8724

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Dated: Sept 10, 2004

By: Michael C. Martensen  
Michael C. Martensen, Reg. No. 46,901

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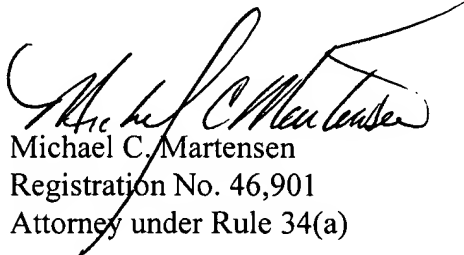
Pursuant to the provisions of 37 CFR. 1.56 and 1.97-1.98, Applicants hereby cite the references listed on the accompanying substitute PTO-1449 without inferring or suggesting, but instead expressly disclaiming any inference or suggestion, that any more pertinent reference exists. The filing of the information disclosure statement shall not be construed as a representation that a search has been made (37 CFR §1.97(g)), or an admission that the

information cited is, or is considered to be, material to patentability. Applicants enclose herewith copies of the all cited references. All references are in the English language.

The Commissioner is authorized to charge any fees required in connection with the submission of this IDS to deposit account number 19-3140. This sheet is being submitted in duplicate.

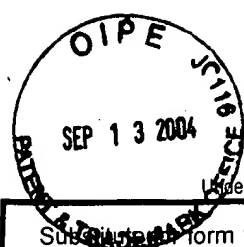
Respectfully submitted,

*Sept 10, 2004*

  
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Substitute Form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 4

**Complete if Known**

Application Number	09/930,836
Filing Date	August 15, 2001
First Named Inventor	Paul C. Kocher
Group Art Unit	2132
Examiner Name	Darrow, Justin T.
Attorney Docket Number	44424162-8724

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA	US-4,200,770	04/29/1980	Hellman et al.	
	AB	US-4,203,166	05/13/1980	Ehrsam et al.	
	AC	US-4,211,919	07/08/1980	Ugon	
	AD	US-4,214,126	07/22/1980	Wipff	
	AE	US-4,243,890	01/06/1981	Miller et al.	
	AF	US-4,405,829	09/20/1983	Rivest et al.	
	AG	US-4,759,063	07/19/1988	Chaum	
	AH	US-4,905,176	02/27/1990	Schulz	
	AI	US-5,136,643	08/04/1992	Fischer	
	AJ	US-5,241,598	08/31/1993	Raith	
	AK	US-5,297,201	03/22/1994	Dunlavy	
	AL	US-5,341,423	08/23/1994	Nossen	
	AM	US-5,369,706	11/29/1994	Latka	
	AN	US-5,404,402	04/04/1995	Sprunk	
	AO	US-5,412,379	05/02/1995	Waraska et al.	
	AP	US-5,539,827	07/23/1996	Liu	
	AQ	US-5,544,086	08/06/1996	Davis et al.	
	AR	US-5,546,463	08/13/1996	Caputo et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	AS	EP 0 529 261 A2	03/03/1993	IBM Corp.		<input type="checkbox"/>
	AT	EP 0 582 395 A2	02/09/1994	Digital Equipment Corp.		<input type="checkbox"/>
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Substituted Form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>	
			Application Number	09/930,836
			Filing Date	August 15, 2001
			First Named Inventor	Paul C. Kocher
			Group Art Unit	2132
			Examiner Name	Darrow, Justin T.
			Attorney Docket Number	44424162-8724
Sheet	2	of 4		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AU	US-5,552,776	09/03/1996	Wade et al.	
	AV	US-5,559,887	09/24/1996	Davis et al.	
	AW	US-5,600,324	02/04/1997	Reed et al.	
	AX	US-5,633,930	05/27/1997	Davis et al.	
	AY	US-5,663,896	09/02/1997	Aucsmith	
	AZ	US-5,733,047	03/31/1998	Furuta et al.	
	BA	US-5,761,306	06/02/1998	Lewis	
	BB	US-5,778,065	07/07/1998	Hauser et al.	
	BC	US-5,848,159	12/08/1998	Collins et al.	
	BD	US-5,991,415	11/23/1999	Shamir	
	BE	US-5,995,629	11/30/1999	Reiner	
	BF	US-6,041,122	03/31/2000	Graunke et al.	
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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
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				Application Number	09/930,836
				Filing Date	August 15, 2001
				First Named Inventor	Paul C. Kocher
				Group Art Unit	2132
				Examiner Name	Darrow, Justin T.
Sheet	3	of	4	Attorney Docket Number	44424162-8724

OTHER ITEMS – NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>	
	B G	BELLARE et al., "Incremental Cryptography: The Case of Hashing and Signing" in: DESMEDT, Y., Advances in Cryptology - Crypto '96 (Berlin, Springer, 1996), pp. 104-113		
	B H	MENZES et al., "Handbook of Applied Cryptography" (CRC Press, 1996), pages including 285-298, 312-319, 452-462, 475, 512-524		
	B I	Bank Technology News. "Cries of Wolf Over Smart Card Security?" Faulkner & Gray, Inc. 01 November 1996		
	B J	American National Standards for Financial Services, secretariat - American Bankers Association (ANS/ABA x9.24-1997), "Financial Services Key Management," approved April 6, 1992, American National Standards Institute; pgs. 1-71		
	B K	JUENEMAN, Robert R., "Analysis of Certain Aspects of Output Feedback Mode", Satellite Business Systems, 1998; pgs. 99-127		
	B L	BAUER, Friedrich L., "Cryptology - Methods and Maxims", Technical University Munich, 1998; pgs. 31-48		
	B M	CONNOR, Doug (Technical Editor), "Cryptographic Techniques - Secure Your Wireless Designs", 01/18/96; pgs. 57-68		
	B N	HORNAUER et al., "Markov Ciphers and Alternating Groups," Eurocrypt 91, 1991; pgs. 453-460		

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<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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Sheet	4	of	4	Attorney Docket Number	44424162-8724

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	B O	KOBLITZ, "A Course in Number Theory and Cryptography" 2e, 1994, Chapter III; pgs. 53-77	
	B P	LAI et al., "Markov Ciphers and Differential Cryptanalysis," Eurocrypt 91, 1991; pgs. 17-38	
	B Q	HACHEZ et. al. "Timing Attack: What Can Be Achieved By A Powerful Adversary?" 1999	
	B R	KOCHER, Paul C., "Cryptanalysis of Diffie-Hellman, RSA, DSS, and Other Systems Using Timing Attacks," Report 7 December 1995; pgs. 1-6	
	B S	KALISKI, Burt, "Timing Attacks on Cryptosystem," RSA Laboratories, Bulletin, Number 2, January 23, 1996	

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